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PLAN DESIGN ISSUES (ADVANCED)

Moderator: VINCENT AMOROSO
Panelists: STEPHEN E. BAIRD
JOHN J. HALEY
PAUL A. RIVERA*
Recorder: VINCENT AMOROSO

Consulting on plan design issues will be covered, including:

- Effect of regulatory restriction on plan design
- Further application of cash balance plans
- Other recent developments that affect plan design

MR. VINCENT AMOROSO: Steve Baird, who is with Buck Consultants in Detroit, will review the considerations that led a major automaker to redesign their plan in light of the discrimination regulation; John Haley, who is with The Wyatt Company in Washington, District of Columbia, will talk about strategic planning that IBM went through not too long ago; and Paul Rivera, who is the manager of benefits development at Xerox, is going to talk about why Xerox has changed their floor offset plan.

MR. PAUL A. RIVERA: Before I start, let me give you a backdrop of Xerox. Some of you may be familiar with the company's statistics, but it's always good to provide a profile. Annual revenues, it's roughly an $18 billion base, we've got about 110,000 employees on a worldwide basis, we operate in virtually every region, all countries in the western hemisphere, Europe, North Africa, Middle East, Pacific Basin, and we may work through third parties or through agency types of arrangements in some of the smaller more developing regions. In the U.S. we employ 65,000 employees; 10,000 of those 65,000 are in the financial services division. Financial services represents about a third of our revenue, and most of those are in the casualty insurance operation, that's Crum & Forster, they have about 10,000. Fifty thousand are in our traditional line of business, office systems, business products, etc., and those are the employees who participate in the plans that I'll be describing. The average Xerox employee is 39 years old, average salary is about $39,000, average tenure is a little bit over 10 years. We've got close to $3 billion in assets between the pension plan, savings plan, and our profit sharing plan. We rely on the traditional funds to manage the growth in these assets, we have an equity fund, we have an insurance contract fund, and we have a company stock fund. And we also have about $800 million of preferred equity in an employee stock ownership plan (ESOP) that was implemented July 1989.

I'm going to talk about the Xerox retirement programs, and particularly the cash balance plan. I will try and focus my comments from your perspective, from a pension consultant's perspective; I want to give you a sense of what was in the minds at Xerox – what were the major drivers that caused the company to change its pension plan and specifically to go the cash balance route. It's going to be important to understand what we had before, so I'll review where we were coming from, the

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prior pension architecture, and then from that I think we'll go into a description of the rationale, and take a look at the factors that were the basis for the company making the modifications to the pension plan.

The prior architecture was somewhat complex. It's a legacy that developed over time, the result of a paternalistic company willing to provide additional flexibility and options and opportunities to its employees, and the price that one pays for that obviously is complexity in administrative workload. It was a floor offset plan. RIGP is the acronym for retirement income guarantee plan; I'll be using that acronym to refer to the pension plan. What we had prior to the modification was a Social Security offset pension formula. It was a 50% of final average pay offset by 50% of Social Security. That was a minimum guarantee, that was the floor. The entitlement would be the higher of that formula at retirement, or the accumulation in a retirement account. That retirement account was a profit sharing arrangement. It provided a minimum of 5% of pay per year company contribution regardless of company performance and regardless of the liability in the pension plan. To the extent that there was good performance on the equities, the floor offset plan funding requirements were tempered. The 5% of pay minimum applied to a base of about $2 billion which resulted in a $100 million a year bill. There was also a 1% of pay match. There was an optional profit sharing, that's a cash or deferred arrangement (CODA), with a minimum of 0% and a maximum of 6.25%. Anything over zero or anything over 5% in these two components of the arrangement was driven by the return on the assets. It was a performance-driven formula that was based on return on assets.

We also had before-tax and after-tax savings into the 401(k). The forfeitures have four potential contributors to annual additions so we're looking at a situation here where there was a minimum guarantee, a profit sharing defined contribution arrangement, an additional optional profit sharing CODA, a 1% match before-tax and after-tax savings, all limited by the Section 415 limitation on annual additions.

Okay, now that's the backdrop, that's where we were coming from. When we look at the factors of the drivers that caused the company to rethink its benefit architecture, we're looking at really external factors and some internal requirements. Now recall this all happened at a point in time where the integration rules were just being promulgated, and there was still some confusion as to what was the interpretation of those rules, but we did know one thing and that was that we didn't have a pension formula that integrated. So it was clear to the company that we needed to change our pension formula; it just didn't integrate appropriately, particularly when we started applying the early retirement reduction factors. We also had just gone through the significant downturn in the market in 1987-89, black and blue Monday. So we had a lot of employee pressure. A lot of employees who had traditionally relied on their defined contribution retirement account were looking at their accumulations going through a roller coaster ride, and they were a little bit concerned. We actually had people who were getting on planes and coming up to corporate headquarters and lobbying before the CEO. They were being funded by other employees. The employee relations aspect of this was unbelievable. It was clear that we had to make some modifications primarily driven by regulation. Management just wanted to make sure that whatever changes we made would not cost the plan or the company anything more than the current on a long-term basis. We had to find a fix for the arrangement on a cost neutral basis, and that was quite a trick because we put in a new pension formula that increased the company's liability. We got rid of the defined contribution which reduced the company's liability, and ended up with money left over. Since we had money left over we looked at enhancing savings opportunities and other retirement supplements. We did end up on a cost neutral basis with what we believe were some fine enhancements to the overall retirement program. The employees wanted to make sure they continued to receive a minimum guarantee and had an individual retirement account; the concept of an individual retirement account was a legacy, we didn't want to change that, we wanted to continue that. Whatever changes we made, we wanted them to be as similar to the prior arrangement as possible.

So what you have is a couple of external factors driving the need for change, company management saying whatever you do, it's not going to cost any more, and employees saying don't change too much, I like the individual retirement account, I like the minimum guarantee, and we need it to maximize the benefits across the board for all employees, including the union. We were going into a year of negotiation with the union, and we wanted to make sure that we were able to come up with a plan that would be voted on by the union. I don't know how it is in other companies but in Xerox, the union membership is probably one of the greater proponents of our benefit plans. They truly understand Xerox benefits, they understand our benefits better than our salaried work force. They understand the true value of the long term, the strategic value, and when we presented these changes to them, it was a no brainer, they voted almost unanimously for the changes that we included. We responded to the requirements by putting in a nonintegrated pension formula. We had some options, we looked at step rate excess arrangements and integration with the Social Security wage base. We wanted to have a maximum fit, we wanted to make sure that whatever formula was put in that it would provide to the maximum number of employees at least the same level of guarantees that they would have had prospectively under the prior arrangement. What won the day for the nonintegrated alternative over the step rate excess alternative is that it got us out of Social Security, it got us out of the integration business once and for all, and the thinking was that if you had the opportunity to get out of the Social Security business do it. So we embraced the opportunity. The 1.4 nonintegrated formula at a 1.4 level was able to provide at least 95% of the work force at least the same minimum guarantee that they would have had under the prior formula and then some. As it turns out, it provided on average a 20% improvement to Xerox employees and increased the company's liability. That's why we needed to start making some other modifications in the plan. Because we had a defined contribution plan, a retirement account, we merged the allocated individual accounts into the pension plan so our cash balance plan is slightly different than your typical cash balance plan; it's got a money purchase component that's running along side of it inside of the pension plan.

In the summer of 1989 we established an ESOP and used some of the money that was left over after the preliminary modifications to partially fund the ESOP. We made some significant improvements to the optional profit sharing plan, we gave more money back to the employee but on the CODA side of the house. The formula went into effect January 1, 1989. We completed the design toward the end of 1989 but we put it in retroactive back to January 1, 1989. Because we wanted to maintain some kind of an annual contribution to an individual retirement account, we introduced a cash balance retirement account. It was a trade for not being able to continue to provide an actual minimum 5% of contribution on the profit sharing side. On January 1, 1990, unlike other cash balance arrangements where you take the present value of the accrued liability of the pension plan and make that your beginning balance, we set the starting balance of the cash balance retirement account equal to value to the closing balance of the profit sharing retirement account that was in the process of being moved into the pension plan so that on January 1, 1990, there were two accounts running in tandem that started off with the same value. The December 31, 1989 value of the retirement account became the January 1, 1990 beginning value of the cash balance retirement account. The last year that we made an actual contribution to the retirement account was in 1990, and we made an equal value in value credit to the cash balance retirement account. We looked at a number of alternatives in terms of the annual interest crediting rate, and with the help of our actuaries and the Treasury Department, we decided that going in with the prior 12 monthly average of the one-year Treasury Bill plus 1% was the most appropriate crediting rate to apply to the cash balance account. We put a two-point floor in there to dampen any potential of volatility on the down side so that in any given year the credited rate could not be 2% points less than the prior year's credited rate.

There's a little section of the Code, I think it's 411(d)6; it's not very comprehensive but it creates a lot of wrestling and taunting or whatever and that's the anti-cutback or the anti-takedown rules, and it was the advice of counsel and the advice of our consultants that we maintain this transitional retirement account. The transitional retirement account was nothing other than the balance at transition of that profit sharing retirement account. This is the money purchase component that I was describing earlier. We really ended up with a 414(k) plan with a minimum cash balance arrangement. I'll let you go back and look at the CODA to try and figure that one out, but that's what we got. We got a minimum cash balance plan with a 414(k) arrangement. The only difference is that in a transitional retirement account, it still continues to be an allocated individual account, but it no longer takes any annual contributions, it just continues to be invested in the equities and the general fund and it will grow. The intent or the idea being is that if that ever becomes the highest entitlement, that has to be paid out so we will continue to track that.

Okay, let me go back now to that architecture side. A 1.4% nonintegrated formula was a significant improvement. I mean it did increase; 95% of employees received at least the minimum guarantee they would have had under the old formula, and for the average employee, it was a 20% improvement. But it continues to be a floor offset, and that's why we refer to our plan as a minimum cash balance arrangement. There still is a pension plan formula, that will be the minimum guarantee. The comparison at termination or at retirement is then the higher of the pension plan accrual, the formula accrual, or the largest of either the cash balance retirement account or the transitional retirement account. When we make some of these modifications, even though we did put in the cash balance retirement account inside the pension plan, the fact that the 5% was now a credit, a pension plan credit, as opposed to a defined contribution, we now were able to reallocate the 415 annual addition opportunities over a smaller number of components, and it opened up additional opportunities for savings to the employees. The ESOP was put in January 1, 1989, it was partly funded by the match and it was partly funded by some of the additional monies left over after we made these first two changes to the plan.

What I'd like to do is run through some comparative examples as to what this meant to the employees' pockets. The formula in itself, as I indicated, provided at least the minimum guarantee that was in place prior to that for 95% of the work force. What we elected to do is for any highly paid individual who would have received a higher minimum guarantee in the future from the prior formula to the extent that they ended up receiving a formula benefit in excess of any other offsets, we would pay that on an unqualifying basis. The plan has been in place for two years now; to date we've had two cases where we've had to pay this supplement, and you'll see the reasons why, that was just good intention but not much of a requirement for it. For the average employee, the minimum guarantee under the new formula was at least 20% better than the old guarantee. This is a typical scenario, we took the average employee and we played the employee out to normal retirement. Using the same individual overlaying the cash balance retirement account, and this is what the union employees began to see, that even with a much more enhanced pension floor, it was more likely than not that their eventual entitlement would come from their individual retirement account, in this particular case, the cash balance retirement account. We've taken a probable set of assumptions and a conservative set of assumptions, and in both cases, the average employee is still going to do better under the cash balance retirement account. For a highly paid individual, conceivably you can have a situation where the old minimum guarantee would have paid a higher benefit. If this were to happen and the previous minimum would have paid 108,000, the new minimum 101,000, the amount that would be paid on an unqualified basis, would be the difference between the 108,000 and the 101,000, which is the qualified accrual.

What I've tried to do is give you a sense of what a potential client's thinking is when the client puts in these types of arrangements.

MR. AMOROSO: Xerox determined the amount of the cost of the old plan and the cost of the new plan. In making those projections, you made assumptions about future investment earnings of the assets invested in the cash balance portion of the plan. My question is not which assumptions you decided on, but rather what was the process for deciding whether to use assumption matrix A versus B?

MR. RIVERA: We used the most realistic, probable assumptions that our actuaries were willing to sign on the dotted line.

MR. AMOROSO: And which parts of the house at Xerox were involved in considering those alternatives?

MR. RIVERA: That would have been the corporate benefits, our organization, in collaboration with our treasury department and our actuaries. I'll take it the next step further, for us it was interesting what the assumption was. The assumption was a 1% spread between equities and the cash balance retirement account (CBRA) crediting rate.

MR. AMOROSO: Pretty conservative.

MR. RIVERA: Well, it was very conservative, but the actuaries weren't willing to certify anything other than that; also, I think you want to be conservative when you're increasing your liability on the minimum guarantee by 20%.

OPEN FORUM

MS. MARY ELIZABETH A. REDDING: When you showed the projected benefit illustrations to the union, what kind of assumptions did you use, particularly regarding salaries and what did you show them for future increases?

MR. RIVERA: Yes, we assumed what had been the traditional historical trend in the prior 10 years of about 4% per year.

FROM THE FLOOR: I ran into one case where the client wouldn't let us show future increases to the union. That meant to do a fair comparison, you had to really use a strange set of assumptions so that the cash balance plan wouldn't be too overwhelmingly wonderful compared with a final pay plan.

MR. RIVERA: Maybe we happen to be rather fortunate; by the time this thing hits voting and negotiation and contracts, the union management and a good part of the union membership are already familiar with what's coming. We meet with them on a quarterly basis, and so it never comes as a surprise to them. We happen to have a very good relationship with our union so that we can sit down with the joint administrative board and show projected increases, and they will understand that that's exactly all it is, it's a projected increase, but it's a realistic projected increase.

MR. ETHAN E. KRA: Did the union feel that they were giving up much in giving up the outside potential of positive investment results because that's really what you use to fund or finance the improvements that they saw on a guaranteed basis, they were coming out of giving up that upside potential, what was the reaction to that?

MR. RIVERA: It was the reverse, and that's the point I was trying to refer to earlier. When we completed the design, we participate in the Hewett Index, competitive analysis, and we had Hewett run the index over the new arrangement and it improved on a number of fronts, and one of the measures that the new arrangement improved over the prior arrangement was long-term security, significantly much so, and that was something that was very apparent to the union. The noise on the point you just raised came from the salaried work force, the engineering community.

FROM THE FLOOR: And what was their reaction?

MR. RIVERA: They didn't like it. They didn't like it before last year; last year they were all loving it because the cash balance was doing much better than the equities. Well, the argument they would give us is things have been moving at 15% over the past 10 years, how can you use the 1% spread? And we go back and say, look, we can't get the actuaries to sign up to a 15% movement, I mean if you go back and recast 20 years, it was closer to 10% so we don't have any crystal ball that's better than anybody else's.

MR. JOHN J. HALEY: I'll be talking with you about the IBM plan. I'm going to talk about some redesign work that was done for IBM's pension plan, and what I hope to do here is give you an overall feel for what was done, and in part why we decided to do what we ended up doing. I'll be using information that's been made publicly available by IBM so I won't be going through any of their trade secrets. A lot of this has been written up in various sources, and some of you may be familiar with some of the details of what's happened.

Let me tell you the background and what we were facing. The current environment with IBM is it's a company that has been going through some restructurings, and in the latter half of the 1980s, IBM has been attempting to reduce its population. In fact about the mid-1980s, we had a population a little over 240,000 employees, and they're down to just over 200,000 now, this is for the U.S. work force, so IBM has been encouraging employees to leave. IBM is a company that maintains a no-layoff policy so in fact, when it goes through restructuring, it is essentially trying to build incentive programs for employees to move on. Now that's done in a couple different ways. There's the typical severance kind of arrangement, and in fact IBM has also introduced some early retirement incentive programs; in 1986 it had a very big one.

The average retirement age of employees in the latter half of the 1980s was about age 59, which is down several years from what it had been earlier. So we're seeing an environment where the retirement age has dropped to about age 59, which in some ways might not be a bad average age going forward, but it's only been accomplished by means of having these large-scale incentive programs that are somewhat disruptive to ongoing human resource planning. So the current environment is one that IBM would not like to be duplicating in the long run.

When IBM looks out into the future and asks itself what is going to be happening, I think there are two factors that we end up looking at. One is just the Work force 2000 projections that tell us that there's not going to be enough people around in the future, and that one of the things that employers ought to be thinking about is having retirement plans which encourage employees to work longer to get more service out of them, and in fact, the plan that IBM had before this is one that encouraged early retirement. So if they follow that traditional line of thinking, what they would be looking at is something which in the long run, and I'm talking 20 years in the future, we're looking at designing for 2010 and beyond. We would be looking at something where we want to try and remove the early retirement subsidies. As against that, we have what, and this is my phrase not theirs, is called human technological adolescence.

The fact is that in knowledge-based companies, it may often occur that employees, that people just out of school, were relatively recently educated in a subject may be as valuable and in some cases more valuable than people who have been working for many years in the field. Actuaries are perhaps a prime example of that, I'm less certain of that each year that I go on, but it certainly seemed to me 10 years ago that was clearly the case. But you can think of a lot of companies where this could occur, I mean in engineering is perhaps a good example, programming, etc. So in a knowledge-based company, it may perhaps be that you want an environment where you build up the financial wherewithal so that employees can make the right decision, that in fact if they feel that they're no longer contributing the way they should be, they're financially able to retire. Too often what happens, particularly in some of these high-tech companies, is that an employee who feels that he's not contributing the way he could doesn't have the resources to retire, and that's how you run into some of these surplus employee population problems.

The second point that in fact we wanted to build something where employees were able to make a choice based on how they felt they were contributing. The 1990 retirement plan, first of all, what was the early retirement eligibility? Several different conditions: you could retire at age 65 with any service, at age 62 with five years of service, at age 55 with 15, or any age with 30 years of service. The last two are really the important conditions to meet, you're either age 55 with 15 years of service, or you have 30 years of service, you can retire at any age. What this means though is that the employee who's hired right out of school, let's say around 21 or 22, is eligible to retire in his early 50s. The average age at hire for employees is about 25-26, so we're really talking about the typical employee being eligible to retire somewhere around age 55, in fact he then falls under either of the last two conditions.

What was the benefit formula at that time? Well, there are a couple different benefit formulas that could apply, but the important one is the one that provided 1.5% of 10-year average pay times the number of years of service. It's a nonintegrated formula that applies to the bulk of the population. If you look at 10-year average pay as being somewhere around 80% of final pay, then somebody with 30 years of service would be getting 80% of 45% so they're somewhere in the mid-30s in terms of final pay as to what they'd be getting.

Now the early retirement benefits that were provided were unreduced at age 60, reduced 2% per year from 60-55, and a reduced 4% per year then below 55. So actually what we have here is pretty good early retirement reduction factors. Now of course, the additional 4% per year below age 55 only applies to somebody with 30 or more years of service. In fact the 55-60 ones only apply to people with 15 or more years of service because you need that much service to be able to retire then. What did these look like for a typical employee? The employee at age 50 with 30 years of service could get about 25% of final pay, that's with a 70% reduction factor then. They get 90% at age 55, so at age 55 with 35 years of service, they would be looking at about 37% of pay and they'd be looking at about 47% of pay at age 60. Now let me just make two points about this. First of all, these are generally pretty good benefits if you compare them with what other companies might provide at early retirement at these ages. The other point I make is how much that goes up. An employee deciding whether to work a few extra years sees a pretty large increase as a percent of final pay that he or she is getting.

MR. AMOROSO: Is final pay the last pay?

MR. HALEY: Yes, it's your last year's pay in taking as a percentage of. So they see a pretty good increase over there. An appraisal with this plan is what the employees think about it. The employees generally like the plan, they generally appreciated the plan, and in fact there's a lot of communication that goes on. IBM spends a lot of time communicating its retirement plan to the employees so they generally liked it. However, they were concerned about early retirement reduction factors. It seems incredible perhaps looking at it the actuarial side that somebody could think that getting 90% of their accrued at age 55 was working a hardship on them, but I'm sure you've all seen that. Employees look at early retirement reduction as a penalty and not as a huge subsidy given a career and work, so the employee who came out of college and felt that he or she worked for a career felt, I've worked here my whole working lifetime, and now you're applying a penalty when I want to retire, and in fact these employees were the most grieved about it. Retirees seem to feel that they should have been given more information about planning for retirement, that they would have made better decisions, and they would have done things differently. Now this was said even when in fact they'd be given the kind of information that they asked about.

What did the company think about the plan? Well, we do some surveys and they're one of the most valuable retirement plans in the peer group that they measure themselves against, and in fact one of the things that we try and do when we're surveying and ranking them against some other companies is how do they compare for the average age and perhaps which employees are going out, and with very good early retirement benefits, they tend to look pretty good there. There was a concern, however, about the absolute dollars at early retirement. For example, if I'm getting 25% of final pay at age 50, 50 with 30 years of service, it doesn't do me any good for the company to tell me that's much better than you could get anywhere else if in fact I can't retire on that. So the absolute dollars are a concern and not just the relative dollars if you want employees to be able to retire early. And last, there's a concern about the pattern of retirement benefits. As I mentioned, you saw that big increase as people had more and more service, so the pattern of retirement benefits was something that we wanted to tackle also.

It's been a long time coming, but now I'll tell you about the changes the company made, several different ones. First, we introduced an unreduced benefit with 30 years of service. So this means all of a sudden that the employee that was getting at 55 and 30 went from 25% of pay up to around 36% of pay, a pretty big increase. In line with the unreduced at 30, one of the things we wanted to focus on was the sense that you're spending more money to deliver unreduced benefits at 30 years of service, and that's kind of the benefit that the plan was targeting, the 30-year service point, and in fact we didn't just want to be increasing benefits beyond 30 years of service. So in line with that, we introduced a 30-year service credit maximum. Now the 30-year service credit maximum has a long transition period, it doesn't apply until the next millennium, it's effective January 1, 2001, so employees get to keep any service they've earned up until that time, and that will always be used in the formula, but they won't get any accruals beyond that, the 30-year maximum applies then. This ensures that there's really no impact at all on near-term or even medium-term retirees, but in fact it's been communicated a long time ahead of time that this applies. One of the interesting things about this, just as an aside from an actuarial viewpoint or from a SFAS 87 viewpoint, is that there's no cost implications for doing that this year. Let's take an employee we're projecting who would have had 40 years of service and he now has 25, we're going to be capping his service in the future but in fact we've shortened the accrual period for SFAS 87, and so the amount by which we've reduced the benefit, the accrual period is shortened by the same amount, we get the same accrued liability, we get the same service cost. So that's an interesting thing to try and explain to a client why this benefit that saves all this money in the long run doesn't save any expense.

The other thing that was done and perhaps one of the biggest changes was to introduce a cash balance plan. Now this cash balance plan is being put in addition to the regular defined benefit plan. So this is not a cash balance plan where we're converting the existing retirement plan into a cash balance.

IBM is now going to have two plans, what we call the core plan, the existing 1990 retirement plan with these first two changes, plus the money that's available from the cash balance. The cash balance is going to be phased in, 1% of pay is going to go in 1992, 2% of pay in 1993, and 3% of pay in 1994 and beyond. Again, it's not integrated, it's flat percentage of pay for everybody. The phase into the credits was accomplished because the cash balance plan is meant to be self-financing. IBM is going to take a total compensation approach, and what they're going to look at is their salary increase pool for 1992. The salary increase for 1992 will be up to 1% lower than it would otherwise have been. The salary increase pool for 1993 will be up to 1% lower than it would have been, and the salary increase pool for 1994 will be up to 1% lower than it would have been. Now if they lower each of these by 1%, what will happen is in 1995 employees will be getting 3% of pay going into a cash balance plan, that's 97% of what it would have been otherwise so it is self-financing as far as that goes. An initial allocation was also provided so that employees might welcome the change. The initial allocation is equal to 5% of your pay on January 31, 1991. So although employees saw that they were paying for the cash balance, they also got this 5% of pay that started the whole thing off. The cash balance plan is going to be accumulated, and employees will have a lump sum option; they'll also have an annuity option, and to get the annuity we're going to divide by 7.5 so it's going to be a heavily subsidized annuity option. That's at any retirement age so essentially we have unreduced retirement for the cash balance plan annuity.

The last change we made is one that is cosmetic pretty much, it's a change to a five-year base. Previously, they gave 1.5% of a 10-year average base as the formula, now it's going to be 1.35% of a five-year base. That produces at about 4.57% per year pay increases that produces an identical benefit so for most employees, it has a negligible effect.

Let me just make a couple of other observations about the cash balance plan. First, we're targeting 30 years of service, that's where we want to build up our benefit, and we're going to provide that to you unreduced. Second, we want add on some additional benefits because maybe 36% of pay which is about what you'd get here for an average employee, is not enough. That's where the cash balance plan comes in. We could have done a couple of other things. We could have put in a contributory element with after-tax contributions to the existing plan. We could have put in a defined contribution plan with just a fixed contribution rate instead. The cash balance plan was thought more desirable than say a defined contribution alternative because with the employer investing the assets, we ought to be able to do better in the long run. We know that employees will put about 67% of the money in fixed income and we'd rather get the better return that the employer would get investing them. In addition, we can also subsidize early retirement and that perhaps was one of the most important features there.

So what does this look like? Comparing the 1990 and 1991 retirement plans, the guy who's hired at age 20, the 50-30 guy, he sees a big increase in what he can get at age 55. The individual who's hired five years later, is about equally well off, it's 37% versus 36%. In fact, the only reason that these two are approximately equal is because I'm only counting 30 years of service here, if I was counting less service here, this guy would be even a little better off. What we've done is we've cut down the 60-40 benefit, that's no longer 40% of pay. It's going to be 36% of pay across the board because I'm not counting more than 30 years of service. So what I've done is I've completely changed the pattern of retirement benefits here. The employee looks at the same percentage of final pay that he or she is going to be getting at any age with 30 years of service. I no longer built in these incentives to keep people working.

MR. AMOROSO: Do you get the cash balance allocation after 30 years?

MR. HALEY: Yes, the cash balance allocation will be provided after 30 years. For example, in a comparison of what it might look like 30 years from now, in 2020 with the cash balance plan added in, I can get some increases in the percentage of final pay that I'm providing. I moved the 36% at age 50 up to 52 by an additional 16% of pay, and then I've moved the 36% up to 60% by an additional 24% of pay at age 60. In terms of the amount of money I'm providing, now I'm up over half of final pay at all these different ages. And now we have a benefit that in the long run we think will give people the flexibility, the wherewithal, to make real retirement decisions.

The retirement plan is well positioned to deal with the long-term business needs, the extent that it's not anticipated that in the long run there's going to be the same kind of need for the incentive plans that they had before. Employees are going to have the financial resources to make meaningful choices. This was announced January 31 of this year, and there's been a real positive employee reaction to it. The one feature that came out of all this though is that retirement planning does need to be emphasized, and as part of the introduction of this, there's going to be some work on how financial planning for retirement is communicated to employees, and IBM is working very hard at that right now. Just to mention here about long-term business needs, we divided up different plan changes we can do and we like to think of them as strategic, long-run changes versus the tactical; some changes we make just for the short term, and this is truly what we would call strategic, in fact when you think about it, only the unreduced retirement is effective immediately. The service cap and the cash balance plans themselves are not going to be effective for many, many years into the future. So this is really the beginning of the process of building the retirement plan that they think they'd like to have in 2010, and the idea is that if you want to build this up, you have to start now. IBM doesn't have the money to throw around to give people huge count balances immediately or huge payments to be able to retire so these are things that we're planning for the long run. Just one aside in terms of doing that: one of the interesting questions that arises in designing a plan like this where you're anticipating these kind of changes is how do you deal with that from the assumption setting the stage, in particular the early retirement assumptions. We have early retirement assumptions that vary by age and service right now, but in fact what we've had to do is to introduce early retirement assumptions that vary by age, service, and calendar year because we think the experience we're going to see in 2020 is markedly different from what we expect in 1997, for instance.

MR. AMOROSO: John, was the cash balance feature subject to a different vesting schedule?

MR. HALEY: Oh, yes, Vince. The cash balance is 100% vested.

MR. AMOROSO: And a follow-up question on that because I guess the employees are viewing that really as their money, and so that's always fully vested. If I'm not mistaken, what you said was the cash balance plan was really being put in conjunction with a dampening of future pay raises, and so that the money going into the plan is really coming from a reduction in compensation. If that's correct, it sounds to me like IBM has accomplished something that there's been an awful lot of energy aimed at -- tapping plan surplus. I assume that the IBM plan has a sizeable asset surplus on any measurable basis, and I assume that the asset withdrawal effect of the cash balance change was a point that was not missed by at least you if not by the company as well.

MR. HALEY: Yes, that's right, in fact they do have a sizeable surplus, and in fact they're able to use that more perhaps from a cash viewpoint than from an expense viewpoint because some of these things are clearly going to be very expensive, SFAS 87 expense wise.

MR. AMOROSO: If that's something that you feel comfortable talking about -- they're using pension surplus to pay compensation in effect but in a tactically different way. Was that an important consideration?

MR. HALEY: Interestingly enough, that was not such an important consideration in part because they're not driven that much by cash needs, and from the expense side of things, it didn't change. In fact interestingly enough as I mentioned, the unreduced at 30 comes in as an immediate expense, the cash balance initial allocation and in fact changes in early retirement assumptions provide additional expense, the service credit maximums have no effect on SFAS 87 expense, so in fact, the only thing that really serves to reduce immediate expense is perhaps any changes you might want to make in your salary increase assumptions to reflect the 3% lower. So that wasn't one of the big drivers although it was not unnoticed.

MR. MICHAEL I. WIESNER: I may have missed a point there. When looking at the work force 2000 issues, I would think you would be concerned about people leaving too early yet you wound up substantially improving early retirement benefits so that people could leave earlier. Now obviously that makes it less necessary to have window programs because people will be leaving continuously early, but I'm not sure how that works with the work force 2000 issues.

MR. HALEY: Perhaps I didn't do a good enough job of explaining when we were looking at the future. We recognize that the work force 2000 is what you would get from just looking at the number of employees and the demographics, the conclusions you'd reach about a retirement plan and the appropriate design are entirely diametrically opposed to the conclusions that you would reach from saying oh, by the way, we think in a knowledge-based business, in a high-tech business, we're better off with younger employees coming in, with newer ones. So we recognized that one of the choices we had to make was which path did we want to follow, and I'm not saying that's the right one for everybody, in this case that seemed to be the right one for them.

MR. WIESNER: The second question I had was with respect to the total compensation issues. The one thing you didn't mention that's a very key consideration for retirees, particularly early retirees, is retiree medical for them and their dependents, and I'm sure you examined that very carefully. You didn't mention this in this presentation so how did that fit into the picture?

MR. HALEY: The retiree medical plan is something we looked at, basically I should perhaps have emphasized this a little more, we didn't change conditions for eligibility for early retirement. What we did do, we think, is advance the age at which people are likely to retire. IBM has a retiree medical plan, employees will still be eligible for that. One of the things we did by this change, by advancing the age at which they get it was to increase the SFAS 106 liability over what it would have been. You may have noticed that IBM actually adopted SFAS 106 in March of this year, and took the hit for the full accumulated postretirement benefit obligation (APBO). The APBO was calculated based on the new assumptions as to retirement, so we were aware of what that effect was.

MR. WIESNER: But there were no plan changes per se to try to reduce that hit in terms of increasing contributions for future retirees or reducing spousal coverage or something to that effect?

MR. HALEY: Well, IBM has have a retiree medical plan that is already subject to some caps, and that was done previously so there was no need to make any changes there.

MR. JOHN N. CLAYTON: I was quite surprised to see the final average period of 10 years that your original plan had, and up in Canada I think the practice is more typically final average five or final average three. Did you find that was out of line with your competitors, and is that why you went to the final average five or is that pretty standard down in the states to have periods that extend that long in duration?

MR. HALEY: The 10-year average formula was decidedly out of line with what everybody else was doing. Now over the years, IBM had the 10-year average for what seemed like good reasons at the time many years ago, and they never changed it because in fact the benefit that they were producing was in line with where they wanted to be. The decision at this time though was when they were making some other changes maybe instead of explaining to employees that a 10-year average with a 1.5% coefficient was essentially equivalent to a five-year average with 1.35%, it was simpler just to do it. Your perception is correct, it was decidedly out of line, and that was why that change was made, but it really had no important benefit implications other than cosmetic.

MR. STEPHEN E. BAIRD: When I accepted this opportunity, I wasn't sure how this was going to work out but it's working out very well. We've been talking about the year 2000 and cash balance plans and things of the future, and now I'd like to take you back in time a little bit. I'm going to have to ask you to reorient your thinking back to late 1988. In late 1988, all we had to work with were the 401(l) proposed regulations which had just arrived, and IRS notice 88-131. What I'm going to talk about is a company who came to the actuaries and their consultants and said we have two tools to work with, we need to move and we need to move quickly. They had substantial reasons for doing this. The major reason is that we're dealing with a plan with more than 50,000 active participants. Since January 1, 1989, there have been more than 5,000 retirements. Suspending benefit accruals at the end of 1988 and waiting until 1992 to decide what you're going to do was not an option. Also they had a contributory plan, and the question is, if you freeze accruals, do you stop taking contributions? If you do that and subsequently decide you want to have a contributory plan, what happens to the lost benefits for that period of service? If you keep taking contributions, employees would like to know what they're going to get for their contributions. At that point in time, the company was also looking at selling a couple of unrelated businesses. They needed to be able to talk to buyers about what the plans of those businesses were going to look like, so they needed a framework for amending a couple of other plans. And in general, they weren't too scared about moving quickly and changing and communicating with their employees because they were quite familiar with change, particularly government-induced change.

The second factor that led this company to take action is similar to some of the things we've seen with the other plans and that is they didn't have a heavily integrated plan. They didn't have a primary insurance amount (PIA) offset plan. There was no agenda to change benefits. They did feel that they had moved somewhat ahead of their comparative group, which they watch very carefully. They felt they moved ahead in combination of their defined benefit plans and their defined contribution plans. They were a little bit ahead of the competition. When you look at the design, there's nothing in it that is going to really cause a tremendous problem fitting in with the 401(l) restrictions, so you start off with the idea that you're going to use the proposed regulations, and see if we can fit in with it.

Let me give an overview of the defined benefit plans that the company has. There are two gigantic plans. I've heard a lot of definitions of large plans ranging from 1,000 employees to $100 million in assets so I can't use the term large plan because I'm dealing with two plans that combined have 155,000 active participants and $15 billion in assets. Alongside those two plans are a bunch of truly small plans. Other than those two units they were trying to sell which had maybe 5,000 employees and $500 million in assets, the rest of them are very, very small. The total number of plans is under 40 which given a company with an organizational breakdown of about 192 different subsidiaries is a very small number of plans. The major salaried plan is linked to the major hourly plan. That's a key element of what we're going to talk about because this is a place where a historical link is going to be a key element of design.

The basis of the salaried plan is that it provides additional benefits above the hourly plan if the employee contributes. I think it's rather obvious why the plan is set up that way. The salaried plan incorporates several hourly plan features for equity. They don't want the salaried people, no matter what pay range they're in, to get less than the union folks get, which complicates the salaried plan. The other significant element of what we were dealing with was, we had decided, in a concurrent project, that we really didn't have any significant coverage or nondiscrimination issues. The other plans are so small in comparison to the major plans. The highly compensated people are all largely concentrated in the major plan. That led us to use the average benefits test. We had done the average benefits test and we passed easily, and the premise that emerged was that we can't let coverage problems, if we have them, influence the major plan design. If we have a problem, we'll have to address it by either restructuring the number of plans or changing some of those smaller plans.

We did not deal with some of the features of the hourly plan such as the early retirement supplements and that type of thing in the salaried plan. We have a noncontributory benefit which is basically the hourly benefit. In October 1989, the rate was $27 and that applied for all years of noncontributory service, and we had the contributory benefit. I've used A+B because there are various terms in this plan which will trip you up. "A" was basically 0.90% of final average pay benefit. "A" cannot be less than the noncontributory benefit so if you're making $36,000 or less, you get the $27 benefit rather than 0.90 benefit. If you're making more than that, you're going to get 0.90% of final pay for your years of contributory service. "B" was an old career average benefit that at that time stood at 2% of contributory salary in excess of $13,800. Contributory years prior to 1979 had been updated to 1974-78 pay but that was the last update to the career average piece that had been made. The break point of $13,800 had been moved up over time but always by amendment at about the same time they updated the career average. The employees were contributing 3.5% of their base salary in excess of $13,800. The plan covers only base salaries; there are no bonuses in this plan. The company viewed it and it took me awhile to get used to this, but the company viewed this as a 0.9/2.9 formula. I know we have a mix of final average and career average, and I know we have the $27 minimum in there, but that's the way they looked at it because they had been updating the career average over time.

What we ended up with is we made no change to the noncontributory piece and on the contributory side we have a new A+B now. We now have 1.5% of final average pay with a 0.40% final average pay in excess of 150% of covered compensation. So we now have an indexed break point, where we didn't have an indexed break point before. The "B" piece is limited to 35 years, including years of contributory service prior to 1989. And, the new formula won't yield less than the noncontributory rate that underlies it. If you're making $21,600 or less, you'll end up with the $27 benefit. Also, we put in a minimum benefit. It would be nice to say that simplification was one of the things on the agenda but as you'll see, that didn't carry the day. This "minimum" formula applies to all service and is the formula of the future. But if your accrued benefit of December 31, 1988 plus the new "A" plus "B" formula for contributory service, after 1988 is greater, then you'll get that. I misstated that a little bit in saying the accrued benefit as of December 31, 1988. They did not freeze pay on the 0.90%. The timing on all of this stuff is, as I said, late 1988. They originally said that they wanted to go to the April 1989 board meeting. We did make the July board meeting, and that was about as late in the year as they were comfortable with because of employee contributions coming in. So we were dealing with rationalizing, letting the 0.90% float up before the IRS came back and said that you don't have to actually freeze it. The rationale behind that was that basically the 0.90% formula was an unintegrated formula, and that their old integration proof didn't need to be used. The other change we made is we reduced employee contributions to 1.5% of base salary, and that's where we ended up. It's not an incredibly complex way of complying, it is fairly conservative, but that's what the agenda was.

Let me just give you a brief rundown on the early retirement provisions; it will help you understand how the formulas work. We're dealing with age 55 and 10 years of service, or any age with 30 years of service. There are different early retirement factors applied to different pieces of the benefit. The noncontributory benefit had one set of factors, and the contributory benefit had another set of factors. The noncontributory is reduce 6% per year from age 62, the contributory benefits were reduced about 3.33% per year from age 62. The new formula carried that even further. When they put the 0.40% excess benefit in, they used actuarial equivalent reductions from age 65 on down to keep the spread that they have. We have special early benefits that provide an unreduced benefit at ages as low as 50, plus on the noncontributory side, there's a temporary benefit to 62. That's a key element of their ongoing benefit planning. It used to be a mutual consent benefit, and in the auto companies, most people used to go out with the mutual consent benefit. It's now been changed, it applies in remote plant closings, job elimination, reduction of force. However, they still needed to do early retirement windows so they didn't want to get rid of it.

I've given you the background on how the redesign process came about. The way it worked is we had a lot of people involved. We worked with the finance side, we worked with the employee relations side, each side has their own consulting actuary, so we got a lot of input on design here. We had internal and external legal advisors so we had a lot of things going on and a lot of inputs. There was a desire to simplify. In the end, some of the historical factors that I mentioned, having the salaried employees contribute something to get more than what the union employees are getting, preserving the old design ended up carrying the day. The things they did want to change though were the following: (1) they wanted to get more pay-related benefits; (2) they wanted to get away from so much tie in with the union benefits; and, (3) they wanted to go more to final pay. There was a feeling since they hadn't updated since 1979, that the employees were starting to understand that there was some erosion in their benefit, and they were really wondering when the next update was going to come. They wanted to keep employee contributions as I said, but they recognized that this was a good opportunity to lower the employee contributions. Other features they wanted to keep in the plan included step rate integration. They didn't have a PIA offset plan because they didn't like PIA offset plans in the first place. Also, they wanted to have an indexed breakpoint. There was no reason to change the level of integration, it wasn't heavily integrated. There was no real driving reason to change the level of benefits other than what I mentioned about the total benefits might have been getting a little ahead of the competition. They wanted to keep the special early retirement provisions flexible and the ability to use those, and they wanted about the same company cost level.

There are a couple of other external factors that the company took into consider ation. The big external factor was that moderate inflation and SFAS 87 had more or less blurred the distinction between career average and final average plans. The climate had changed and the cost impact had changed so it was a good time to move away from the career average. Another key element is that at that same board meeting there was a newly expanded nonqualified plan for the highly compensated people. I mentioned that the qualified plan doesn't cover bonuses, so there was some concern about the benefits at the upper levels. The big thing here is that whatever we did, whatever shift we had, a nonqualified plan was not a problem because they don't view benefit security as a big problem when the company pays the benefit as opposed to the trust fund paying the benefit. They've been through many cycles like the one we're going through right now. They've been through a lot worse cycles and the name is still on the building, so they don't view benefit security as a problem.

In summary, I think the key factor that led us to this design was that it really wasn't too hard to come up with a formula that would fit in the proposed regulations even not knowing all the answers to how the regulations might change. We were able to find a fairly simple, ongoing formula that did achieve their benefit objectives quickly in order to maintain our credibility with employees. There was a real concern that they do that. We got to it at a time in the year where we were able to adjust the rate at which the contributions were taken so that we didn't have to do refunds of the contributions or anything complicated like that.

I think another factor that I noticed in listening to some of the other presentations and some of the things I've heard at this meeting in terms of some of the new plan designs, is that this company has a history of dealing with and communicating a very complex plan design; I mean this is not the easiest plan in the world and I'm not sure how it even grew up, I haven't been around for the 40 some years that the plan's been around, but I've seen their communication material and it's good, and they somehow have managed to communicate with their work force a complicated traditional defined benefit plan design. I have friends and neighbors who have lived in Detroit a long time. Some of my friends and neighbors work at this company and they will tell you very clearly what their retirement objective is. They know when they reach 30 years of service or when they reach a certain breakpoint in the formula, and when they're planning to retire. They have a good package in total with their defined contribution plans. We talk so much about making it easier for the employees, but I think the complexity of this plan has been introduced more by us. Perhaps it is the tie in with the hourly plan. They know that at 30 years of service, the hourly guys can walk out the door with $2,100 a month at age 62, and $900 a month after that, and they're going to get at least that and something more. They've got an annual benefit statement that tells them some idea of how much more. But that employee acceptance seems to me to be the key element to just doing what we did, and not looking at it on a more strategic ongoing basis.

MR. AMOROSO: This auto company broke ranks with the other Detroit players and making that decision was probably one of the most difficult to make. How did that process go inside this company because once they got over that hurdle, the company could start addressing the wish list of what might the new plan look like?

MR. BAIRD: Well, I think actually, Vince, the hurdle was reached real early, and I think it goes back to what I said and that is that they simply felt that they couldn't wait to see what the other auto companies were going to do. They do exchange a lot of information about their benefits, and I'm sure they knew where those other people were at in terms of how quickly they're going to move, but they just plain said we can't wait, we just have to go with what we've got.